

# Guidelines for Reducing Inflammation with Diet and Supplementation



# Inflammation is the Cause of Most Diseases

## How many of the following inflammation issues apply to you?

- I have chronic aches and pains, such as back pain, neck pain, headaches, or general muscle and/or joint soreness.
- I regularly take anti-inflammatory or anti-pain medications, such as ibuprofen, aspirin, or Tylenol®, or a similar prescription drug.
- I regularly eat grains and grain products, such as white bread, whole wheat bread, pasta, cereal, pretzels, crackers, and any other product made with grains or flours from grains, which includes most desserts and packaged snacks.
- I regularly eat refined sugar (including non-diet sodas).
- I regularly eat partially hydrogenated oils (trans fats) found in most margarines, deep fried foods (French fries, etc.) and most all packaged foods.
- I regularly eat corn oil, safflower oil, sunflower oil, cottonseed oil, soybean oil, and foods made with these oils such as mayonnaise, tarter sauce, margarine, and nearly all salad dressings.
- I regularly eat cheese in more than condiment size portions.
- I regularly consume soy or soy products, or eat them in place of fruits and vegetables.
- I regularly drink or eat dairy products.
- I regularly eat meat and eggs from grain-fed animals (regular supermarket brands).
- I am overweight, and/or it is hard for me to lose weight/fat.
- I can grab too much fat around my waist.
- I am physically lethargic.
- I do not exercise regularly.
- I don't feel well when I exercise, or if I exercise a little more than I should, it is hard to recover.
- I am mentally lethargic and feel rundown and depressed more than I would like.
- I look old and/or feel old for my age.
- My skin looks old and is sagging.
- I am prone to cold, allergy, and flu symptoms.
- I am a smoker.
- I suffer from one or more of the following: arthritis, fibromyalgia, chronic fatigue syndrome, sinusitis, allergies, acne, asthma, digestive conditions, flu symptoms, dysmenorrhea, endometriosis, Alzheimer's disease, Parkinson's disease, multiple sclerosis, cancer, heart disease, osteoporosis, hypertension, depression, the insulin resistance syndrome (pre-diabetes), or diabetes.

\_\_\_\_\_ BMI (Body Mass Index) [Determine BMI at <http://nhlbisupport.com/bmi/>]

Underweight = <18.5; Normal weight = 18.5-24.9; Overweight = 25-29.9; Obesity = BMI of 30 or greater



Name: \_\_\_\_\_ Date: \_\_\_\_\_

# General Guidelines for Deflaming with Nutrition

## Introduction and Basic Deflaming Concepts

As you just discovered, we all suffer from inflammation issues to varying degrees. In short, each of us needs to focus on reducing our individual inflammation issues, and diet is the key to realizing this goal. There are many complicated diet plans available on the market today. Herein is a simple, no-nonsense approach to anti-inflammatory eating. The following foods cause inflammation; that is, they are pro-inflammatory and therefore, should be avoided<sup>1-6</sup>.

- All grains and grain products, including white bread, whole wheat bread, pasta, cereal, pretzels, crackers, and any other product made with grains or flours from grains, which includes most desserts and packaged snacks.
- Partially hydrogenated oils (trans fats) found in margarine, deep fried foods (French fries, etc.) and most all packaged foods.
- Corn oil, safflower oil, sunflower oil, cottonseed oil, soybean oil, and foods made with these oils such as mayonnaise, tartar sauce, margarine, salad dressings, and many packaged foods.
- Soda, dairy, soy, and sugar.
- Meat and eggs from grain-fed animals. This one is difficult for most to do on a consistent basis, so do your best. Lean cuts of meat may be the best choice for non-grass fed animal products.



*Avoid inflammatory foods*

Many individuals find it somewhat distressing and/or depressing that so many foods are pro-inflammatory, and many wonder what there is left to eat. However, more depressing than this is suffering from any of the numerous diseases and conditions caused by inflammation: chronic pain, arthritis, fibromyalgia, chronic fatigue syndrome, sinusitis, allergies, acne, asthma, digestive conditions, flu symptoms, dysmenorrhea, endometriosis, Alzheimer's disease, Parkinson's disease, multiple sclerosis, cancer, heart disease, osteoporosis, hypertension, depression, the insulin resistance syndrome (pre-diabetes), and diabetes<sup>1-6</sup>.

You need to decide how much pain and suffering you are willing to live with, and then, eat and exercise accordingly. The less inflammation you eat, the less inflammation you will have and feel. No one will be perfect with their eating...just do your best.

It is important to embrace the concept that, unlike what you may have heard, there is no such thing as moderation. With every bite you take, you are either deflaming or inflaming. This is a fact we all must accept. So, we should all do our best to eat mostly anti-inflammatory foods.

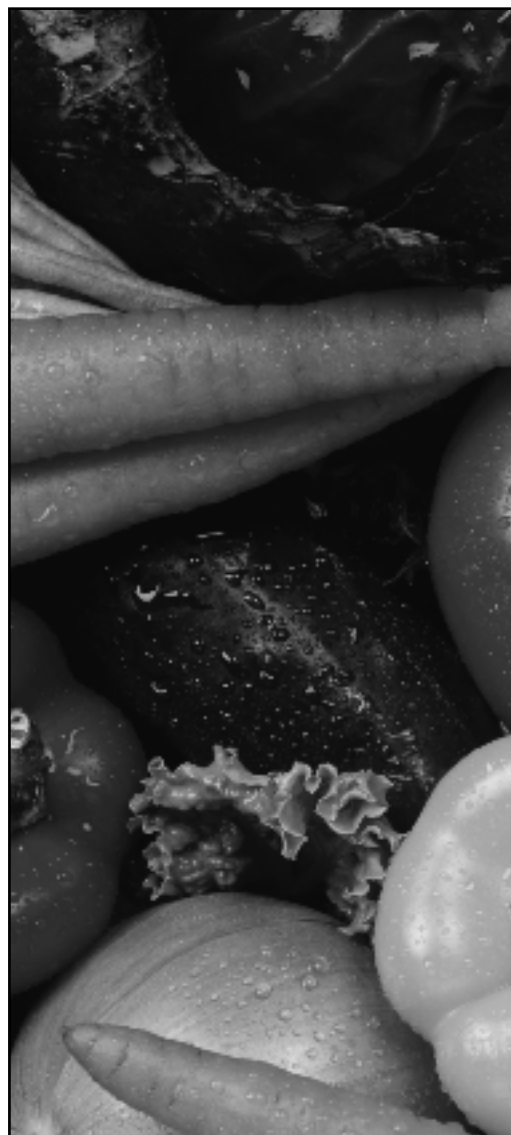
If you are fortunate and have "good" genes, you may be able to handle more inflammatory foods than some of your family members or friends. The problem is that most inflammatory diseases develop slowly and without symptoms...until it is too late, so we all need to be careful about consuming pro-inflammatory foods, and not take for granted what appears to be good health.

In a nutshell, all you need to do is eat mostly fruits, vegetables, nuts, fish, chicken, and meat. Eat until you begin to feel full, then stop. Take the key supplements, and exercise more. There is no need to make it more complicated than this. The following two pages describe anti-inflammatory foods and supplements to help with the deflaming process...it is really very easy to deflame and feel 10 or more years younger.



## Foods and Dietary Suggestions to Fight Inflammation:

- All fruits and vegetables. Eat fruit raw and vegetables raw or lightly cooked. Red and sweet potatoes are acceptable as long as they are consumed with a protein, such as eggs, fish, meat, or fowl.
- Fresh fish (ocean, river, or lake).
- Meat, chicken, eggs from grass-fed animals. Go to [eatwild.com](http://eatwild.com) to find producers of grass-fed animals. If you cannot acquire grass-fed products, do the best you can to get lean cuts of regular meats.
- The best supermarket variety of anti-inflammatory omega-3 (n-3) eggs is Christopher Eggs (600 mg n-3 per egg yolk); which is followed by 4-Grain Vegetarian Omega-3 Eggs (300 mg n-3 per yolk), Sparboe Farms n-3 eggs (250 mg n-3 per yolk), and Eggland's Best (110 mg n-3 per yolk).
- Wild game (deer, elk, etc.).
- Nuts: raw almonds, cashews, walnuts, hazelnuts, macadamia nuts.
- Spices like ginger, turmeric, garlic, dill, oregano, coriander, fennel, red chilli pepper, basil, rosemary, etc. (sea salt is okay if you wish to add a little salt).
- Oils and fats: It is best to use organic oils as they can otherwise concentrate pesticides. Use organic extra virgin olive oil and coconut oil. Butter is also a healthy choice and the best butter comes from grass fed cows. If you buy organic butter, you will get the best available butter (Organic Valley butter and heavy cream is from grass-fed cows).
- Salad dressing: extra virgin olive oil, balsamic vinegar [or lemon juice], [mustard if you like], and spices (Greek, Italian, ginger, dill, oregano, whatever suits your taste).
- Whenever you are thirsty, drink water, or organic green tea (non-organic green tea may contain pesticides and should be avoided).
- Alcohol: Red wine and stout beer are the best choices.
- Candy: Dark chocolate.



## Meal Suggestions

Breakfast suggestion: Omega-3 eggs are the best choice. They can be scrambled with your favorite vegetables, or made into an omelet. Add a moderate portion of sautéed potatoes if you like. It is best to use organic virgin coconut oil for cooking eggs and potatoes. Olive oil would be the next best option.

If you wish to have oatmeal or grits, for example, add a couple of tablespoons of ground up chia seeds, some raisins [or berries], and use a little organic heavy cream.

Meal shake: bananas, blueberries [or your favorite fruit], and egg white or other protein powder is a simple option. You can add some coconut, or your favorite raw nut. Make sure to always use water for blending.



Lunch and dinner suggestion: A chicken [fish, steak] Caesar salad without croutons is an example of a meal that contains appropriate portions of vegetables and protein; it is a model meal that can be applied to all other meals. When you feel like you have room for dessert, eat more vegetables. Or, wait an hour to see if you are indeed still hungry. If so, have your favorite fruit, or one of the healthy desserts listed below.

Dessert #1: 1-2 tbsp of organic heavy cream over frozen cherries, blueberries, etc., or favorite fruit.

Dessert #2: 1-2 tbsp of organic heavy cream over a combination of dried coconut, dates, raisins, and nuts.

Dessert #3 or snack: Dark chocolate, raisins, and raw almonds or favorite nut listed above.

Please realize that you may not have to significantly alter the meals you currently prepare. Simply substitute vegetables for grains, bread, and pasta; and eat more fruit [or healthy dessert/snack options] between meals. Do not be foolish and make deflating a complicated process.



## Supplements to Help Fight Inflammation

More and more research is pointing to the need to take supplements to help promote health and prevent disease...and, inflammation reduction seems to be the most likely mechanism of action for many supplements. Thus, each of the suggested supplements has been selected due to its ability to promote health and/or reduce inflammation. Many people take ten or more of the following supplements, while others opt for only a multivitamin-mineral. Try to at least take the basic program, and if you can, the Core 5 or more is the best option.

It is important to take supplements in addition to a healthy, anti-inflammatory diet. Please visit [www.deflame.com](http://www.deflame.com) for a detailed explanation of each supplement.

### Basic program to help fight inflammation, promote health & disease prevention:

AVED-Multi w/o iron (or AVED-Digest) [2-3 tabs/day]  
 Mega-Magnesium [400 mg/day = 3 caps/day]  
 Conc. Omega-3 (EPA/DHA) [1.2-2.4 grams EPA/DHA/day = 2-4 softgels/day]

### "Core 5" option to help fight inflammation, promote health & disease prevention:

AVED-Multi w/o iron (or AVED-Digest) [2-3 tabs/day]  
 Mega-Magnesium [400 mg/day = 3 caps/day]  
 Conc. Omega-3 (EPA/DHA) [1.2-2.4 grams EPA/DHA/day = 2-4 softgels/day]  
 Coenzyme Q10 [100 mg/day = 1 softgell/day]  
 Pro-Enz [ginger/turmeric/boswellia] [~1 gram/day = 2-4 tabs/day]

### Good additions to Core 5:

Vitamin D [1000-2000 IU/day = 2-5 softgels/day]  
 High Allicin Garlic [5-10 mg allicin/day = 1-2 tabs/day]

### Additional: Anti-aging supplements

ALA Orac-Plus (a-Lipoic acid) [200 mg twice per day = 1 caps 2x/day]  
 Acetyl-L-carnitine [500 mg twice per day = 1 caps 2x/day]

### Additional: Joint support

Glucosamine sulfate [1500 mg/day = 3 tabs 1x/day]  
 Chondroitin sulfate [1200 mg/day = 3 tabs 1x/day]

### Additional: Bone support

Osatate (hydroxyapatite calcium) [1000 mg/day = 2 tabs/day]  
 Daily Cal-Mag-D [5 tabs/day]

### Additional: Digestive support

Probiotic Complete (acidophilus/bifidus) [1-3 caps per day]  
 Digestive Complete [1-3 caps with meals per day]

### Vegetable and Fruit supplements

Premium Greens [1 scoop per day]  
 Premium Red [1 scoop per day]



## Why Grains Inflamm

Grain consumption is a sensitive subject for many individuals, which is why additional information is being provided. Most people have eaten bread, pasta, and cereals for their entire lives, and giving up this food can be psychologically traumatic, which illustrates the strong and inappropriate emotional connection that we have with food. However, if you view eating as a mechanism to fuel the precious vehicle [your body] that conveys you throughout life, then you would not be opposed to making any changes that would benefit the vehicle. Remember, you can only trade in your motor vehicle, not your body vehicle.



*Avoid inflammatory foods*

You should first be aware that grains have been consumed for only a short period of time during man's sojourn on earth. Our genetic code is not dissimilar from the human-like mammals that inhabited the earth some 2 million years. In other words, for the 1,990,000 years that human-like mammals have populated the earth, the following foods were never consumed: grains, pasta, cereal, soy, beans, dairy, refined sugar, partially hydrogenated fats, and seed oils, such as corn, safflower, cottonseed, sunflower, canola, and soybean oil<sup>7</sup>.

Humans are genetically adapted to eat fruits, vegetables, nuts, fish, fowl, and meat. Consider also, that there are no chronic diseases caused by eating these foods. No matter what disease you may suffer from, none of these foods must be eliminated from the diet. The same cannot be said for grains in particular.

### Gluten

Many different biochemical components and properties make grains an inflammatory food; the most notorious is a protein called gluten. Celiac disease is a disabling digestive disease, and is caused by the gluten found in grains. Most notorious on the list of gluten grains is wheat; others include couscous, spelt, kamut, rye, barley, and oats. Among the non-gluten grains are rice, wild rice, millet, and corn. A detailed list of gluten foods can be found at Celiac Sprue Association's website ([www.csaceliacs.org](http://www.csaceliacs.org)).

It is not only those suffering from celiac disease who need to avoid grains. Gluten can cause many other symptoms and conditions, ranging from schizophrenia<sup>7</sup> to more common conditions such as headaches. For example, researchers randomly selected 200 disease-free individuals for the purpose of assessing anti-gluten antibody levels, which is a way to measure gluten sensitivity. A comparison was made of the health complaints between the subjects with the highest antibody levels, and those with the lowest levels...the results were shocking. Fifteen percent of the subjects who had the highest antibody levels suffered from headaches, chronic fatigue, regular digestive complaints, subtle anemic changes, and NO signs of celiac disease<sup>9</sup>. You should understand that headaches, fatigue, and digestive problems are three of the most common symptoms reported by patients to doctors.



## Why Grains Inflamm (cont'd)

### Lectins

All grains and legumes (beans, lentils, soy) also contain sugar-proteins known as lectins, which resist digestion and cooking. Before absorption, lectins are known to cause digestive system inflammation, which may or may not cause obviously linked symptoms<sup>9</sup>. After lectins are absorbed into circulation from the digestive tract, they bind to the surface of cells throughout the body. While all the details are not known, researchers state that, "there is now abundant evidence that lectins can cause disease in man and animals"<sup>10</sup>. Research suggests that lectins may promote the following conditions: inflammatory bowel disease, diabetes mellitus, rheumatoid arthritis, glomerulonephritis, psoriasis, multiple sclerosis, retinitis and cataracts, as well as congenital malformations, infertility, allergies and autoimmune problems<sup>10</sup>.

### Other Problems with Grains

As most people know, calcium is important for bone health. Grains contain a substance called phytic acid, which is known to reduce the absorption of calcium, magnesium and zinc from grains. Grains also promote an acidic body pH, which is known to be inflammatory. And finally, grains contain an elevated ratio of omega-6 to omega-3 fatty acids, which also causes inflammation<sup>7</sup>.

With the above in mind, you may be wondering why we were told that grains are so good for us? First, whole grains do contain nutrients and fiber, both of which are healthy and anti-inflammatory. Therefore, grains are lobbied and marketed as a health food. Most of us are utterly ignorant about the inflammatory dark side of grains. Second, grains are inexpensive and can be stored easily, so we consume lots of them. We are never told that we can get all the nutrients and fiber we require by eating fruits, vegetables, and nuts, and there is no need to consume grains. Consider that, throughout history, whenever grains were first adopted as a staple food that replaced animal-based proteins, a host of negative health outcomes occurred, including<sup>7</sup>:

- A characteristic reduction in stature
- An increase in infant mortality
- A reduction in lifespan
- An increased incidence of infectious diseases
- An increase in iron deficiency anemia
- An increased incidence of osteomalacia, osteoporosis and other bone mineral disorders
- An increase in the number of dental cavities and enamel defects

Many of these seven problems still plague us today. Readers must realize that these seven problems and the numerous conditions mentioned earlier, have only been associated with the consumption of grains and legumes, and have never ever been associated with the consumption of fruit, vegetable, nuts, and healthy animal products.



*Avoid inflammatory foods*



## What Should You Do? Helpful Hints

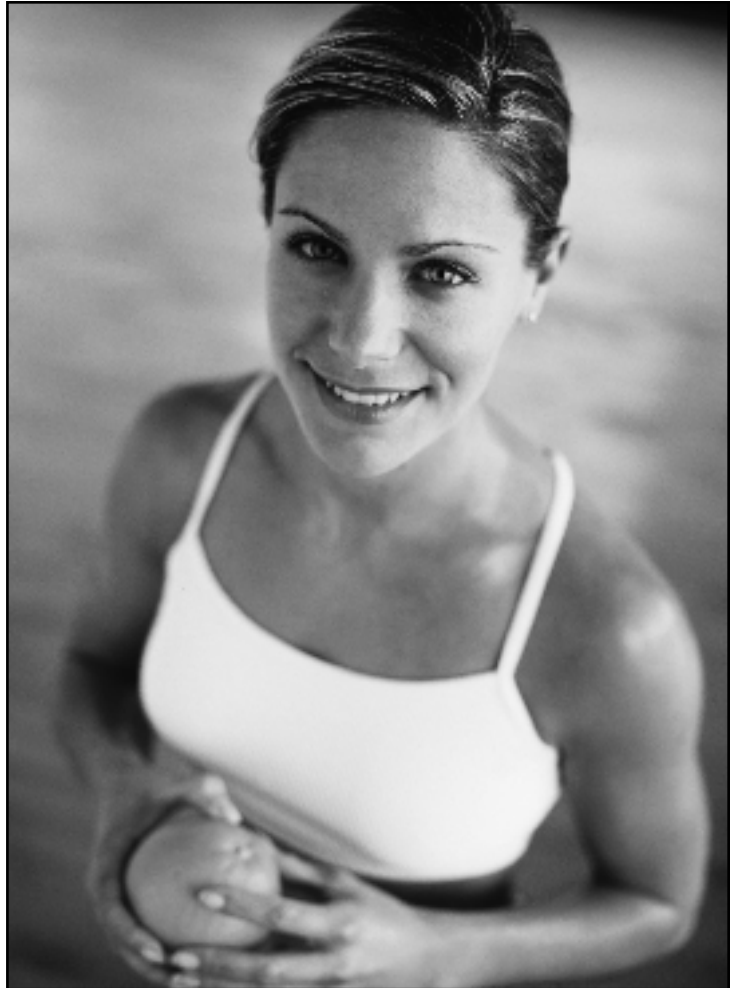
### Making a decision

You need to make a choice regarding foods you eat: will they be pro-inflammatory foods or anti-inflammatory foods? If you have no symptoms and feel wonderful, you need to decide if you want to risk regularly consuming pro-inflammatory foods that are known to cause significant health problems and disease in many humans. If you do suffer from any of the conditions previously mentioned, you may wish to see if grains/legumes and the other pro-inflammatory foods are a cause.

If you make the decision to defame, you need to first visualize and consider what might be a reasonable deflaming lifestyle for you on a long-term basis. You need to make sure that decision is commensurate to how well you wish to feel. For example, if you discover that grains give you headaches, you need to decide how much headache pain you can handle. If you want to be headache free, then you may need to eat absolutely no grains. Be aware that there are case reports in the scientific literature that describe patients who can maintain a headache-free state, only if they avoid grains<sup>11</sup>.

After coming to a decision in your mind, you need to commit to discovering how your health is influenced by the consumption of pro-inflammatory foods. You need to commit for at least 1 month to a near perfect deflaming diet. Within a week, you are likely to feel a difference, and by the end of 1 month you will know for sure how food affects your health [some people who are quite inflamed may need 2-3 months].

If you want to cheat, and maintain your new-found feelings of wellness, you will need to determine what level of pro-inflammatory foods you can consume. And when you find the level that suits you best, stick with it. You also need to decide whether you wish to take supplements. Most important is that you need to feel good about whatever supplements you wish to take, whether that is just a multivitamin or the Core 5 plus an additional 5 supplements. Again, make a decision, and stick to your decision. Over time, you may find that you want to take less or more supplements– not a problem. Find what suits you best, and stick with it.

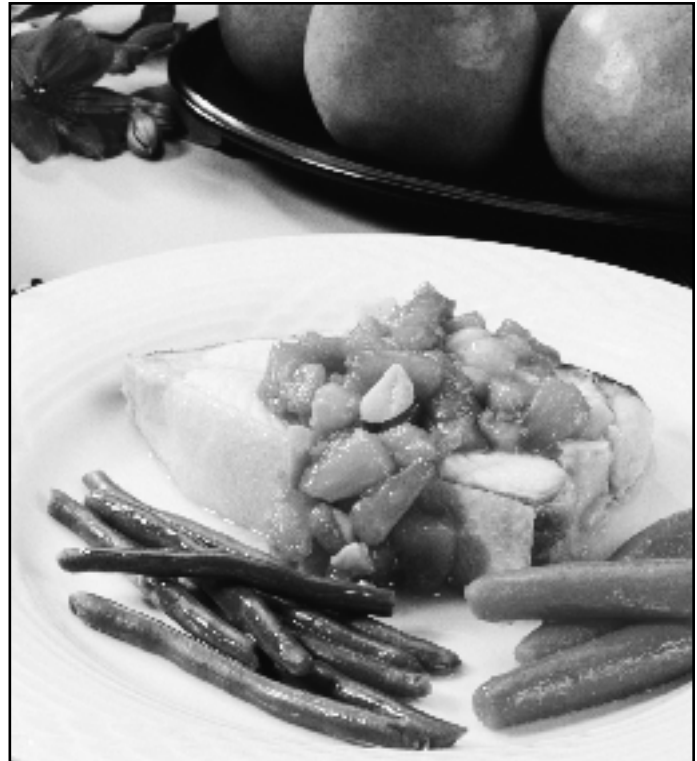


## What Should You Do? Helpful Hints (cont'd)

### Meal preparation

For some, meal preparation becomes an obstacle to healthy, anti-inflammatory eating. And others feel that they can never eat out in a restaurant, as no anti-inflammatory meals are available. It is important to understand that our favorite ethnic restaurants offer a wide range of anti-inflammatory meals. Because traditional Indian, Asian, Hispanic, Greek, Italian meals focus on vegetables, fruit, animal products, and anti-inflammatory spices, they can all be considered anti-inflammatory...just try and avoid the grains, bread and pasta, which represent a modern pro-inflammatory additions to these meals. For cooking at home, any traditional ethnic grain/flour-free recipe can be prepared at home.

Several recently published texts are available that contain many anti-inflammatory recipes. The Paleodiet<sup>3</sup>, Eat Fat, Lose Fat<sup>12</sup>, and Nourishing Traditions<sup>13</sup> provide anti-inflammatory nutritional advice and offer a wide variety of recipes for meal preparation. Whenever you are in doubt about what to eat, stick with the anti-inflammatory foods mentioned above.



### References

1. Seaman DR. The diet-induced pro-inflammatory state: a cause of chronic pain and other degenerative diseases? *J Manipulative Physiol Ther* 2002; 25(3):168-79
2. Seaman DR. Nutritional considerations for inflammation and pain. In: Liebensohn CL. Editor. *Rehabilitation of the spine: a practitioners manual*. 2nd ed. Philadelphia: Lippincott Williams & Wilkins; 2006: p.728-740
3. Cordain L. *The paleodiet*. New York: John Wiley & Sons; 2002
4. Cordain L, Eaton SB, Anthony Sebastian A, Mann N, Lindeberg S, Watkins BA, O'Keefe JH, Brand-Miller J. Origins and evolution of the western diet: Health implications for the 21st century. *Am J Clin Nutr* 2005;81:341-54.
5. Simopoulos AP. Essential fatty acids in health and chronic disease. *Am J Clin Nutr* 1999; 70(3 Suppl):560S-569S
6. Simopoulos AP. Omega-3 fatty acids in inflammation and autoimmune diseases. *J Am Coll Nutr* 2002; 21(6):495-505
7. Cordain L. Cereal grains: humanity's double-edged sword. *World Rev Nutr Diet* 1999; 84:19-73
8. Arnason JA, Gudjonsson H, Freysdottir J, Jonsdottir I, Valdimarsson H. Do adults with high gliadin antibody concentrations have subclinical gluten intolerance? *Gut* 1992; 33:194-197
9. Cordain L, Toohey L, Smith MJ, Hickey MS. Modulation of immune function by dietary lectins in rheumatoid arthritis. *Brit J Nutr* 2000; 83:207-17
10. Freed DLJ. Lectins in food: their importance in health and disease. *J Nutr Med* 1991; 2:45-64
11. Hadjivassiliou M, Grunewald RA, Lawden M, Davies-Jones GA, Powell T, Smith CM. Headache and CNS white matter abnormalities associated with gluten sensitivity. *Neurology* 2001; 56:385-388
12. Enig MG, Fallon S. *Eat fat, lose fat*. New York: Hudson Street Press; 2005
13. Fallon S, Enig M. *Nourishing traditions*. 2nd ed. Washington, DC: New Trends Publishing; 2001



# Why use Anabolic Laboratories?

Manufacturing Facility Standards

Pharmaceutical cGMPs  
(government regulated)

NNFA GMPs  
(Third-party regulated)

NO official GMPs  
(no regulations)

Nutritional Supplement Companies  
Serving Healthcare Practitioners

ANABOLIC  
LABORATORIES

Approximately  
**5**  
Professional  
Brands

All Other Brands

GMP: Good Manufacturing Practices

Currently, there are no government standards specific to supplement manufacturing. This lack of regulation creates a confusing environment for patients desiring the highest quality nutritional supplements.

A common method of comparing potential brands is to use the nutritional supplement manufacturer's common yardstick of quality - the Good Manufacturing Practices, or GMPs. The GMP seal is awarded to companies by NNFA (National Nutritional Foods Association). Their GMP Certification Program "is designed to verify compliance of member suppliers of dietary supplements with a standardized set of good manufacturing practices," and is based upon third party inspections. As illustrated above, of the myriad nutritional supplement companies serving healthcare practitioners, approximately five (including Anabolic Laboratories) meet NNFA GMP standards. The rest do not, and manufacture under no formal regulation.

However, there is an even stricter regulation program than the NNFA GMPs, and that program is the Pharmaceutical cGMPs, which is regulated by the Food & Drug Administration. Because of our status as a licensed manufacturer of pharmaceuticals, Anabolic Laboratories is the only nutritional supplement company serving healthcare practitioners who operates a facility meeting the FDA's stringent pharmaceutical standards. These standards are orders of magnitude more demanding than the NNFA GMPs. Therefore, when you choose Anabolic Laboratories nutritional supplements, you are choosing the pinnacle of quality and oversight - supplements manufactured to a higher standard.